

AMENDMENTS TO THE CLAIMS:

Please cancel claim 3 without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of predicting component crack behavior in a nuclear reactor, the method comprising:

(a) receiving input water chemistry characteristics over a global computer network;

(b) accessing a crack growth behavior model that predicts component crack behavior according to the input water chemistry characteristics; and

(c) outputting over the global computer network a crack growth prediction profile according to an analysis of the crack growth behavior model by outputting a real time crack growth prediction according to the input water chemistry characteristics.

2. (Original) A method according to claim 1, wherein step (c) is practiced by generating a graphical representation of a crack growth rate according to the input water chemistry characteristics.

3. (Canceled)

4. (Currently Amended) A computer system for predicting component crack behavior in a nuclear reactor, the computer system comprising:

at least one user computer running a computer program that receives input water chemistry characteristics; and

a system server running a server program, the at least one user computer and the system server being interconnected by a computer network, the system server storing a crack growth behavior model that predicts component crack behavior according to the input water chemistry characteristics, and the system server outputting over the computer network a crack growth prediction profile according to an analysis of the crack growth behavior model by outputting a real time crack growth prediction according to the input water chemistry characteristics.

5. (Currently Amended) A computer program embodied on a computer readable medium for predicting component crack behavior in a boiling water nuclear reactor, the computer program comprising:

means for receiving input water chemistry characteristics over a global computer network;

means for accessing a crack growth behavior model that predicts component crack behavior according to the input water chemistry characteristics; and

means for outputting over the global computer network a crack growth prediction profile or crack growth based result according to an analysis of the crack growth behavior model by outputting a real time crack growth prediction according to the input water chemistry characteristics.

6. (New) A method of predicting component crack behavior in a nuclear reactor, the method comprising:

(a) receiving input water chemistry characteristics over a global computer network;

(b) accessing a crack growth behavior model that predicts component crack behavior according to the input water chemistry characteristics, wherein the input water chemistry characteristics are the only data input via the global computer network for predicting component crack behavior; and

(c) outputting over the global computer network a crack growth prediction profile according to an analysis of the crack growth behavior model by outputting a real time crack growth prediction according to the input water chemistry characteristics